

# DIMETHYLFORMAMIDE

CAS# 68-12-2

N, N-DIMETHYLFORMAMIDE UN2265

## WARNING!

COMBUSTIBLE LIQUID.

HARMFUL IF ABSORBED THROUGH THE SKIN.

MAY BE HARMFUL IF INHALED.

LIQUID, VAPOR OR MIST MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION

## FIRST AID:

IN CASE OF CONTACT, immediately flush eyes or skin with plenty of water while removing contaminated clothing and shoes. Call a physician. Wash clothing before reuse. Decontaminate or discard contaminated shoes. IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. IF SWALLOWED, DO NOT induce vomiting. Call a physician.

## ATTENTION:

MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CONTAINS DIMETHYLFORMAMIDE WHICH MAY CAUSE LIVER DAMAGE. DIMETHYLFORMAMIDE IS RAPIDLY ABSORBED THROUGH THE SKIN. POSSIBLE CANCER HAZARD BASED ON ANIMAL DATA.

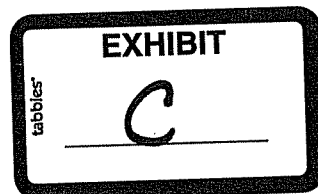
## SPILL AND FIRE PROCEDURES:

Contain spill and keep out of sewer. Absorb with inert material (e.g., dry sand or earth), then place in a chemical waste container for later disposal. Dispose of wastes in accordance with applicable federal, state and local regulations.

In case of fire, use water spray (fog), foam, dry chemical or carbon dioxide.



ASHLAND CHEMICAL, INC.  
SUBSIDIARY OF ASHLAND OIL, INC.  
P.O. BOX 2219, COLUMBUS, OHIO 43216  
24-HOUR EMERGENCY TELEPHONE:  
1-800-274-5263 OR 1-800-ASHLAND

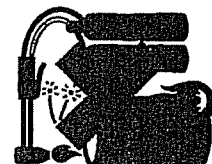


D.ASH-WILSON 000064

FlashPoint = 136°F

HAZARD RATING: HMIS NFPA

HEALTH	3*	1
FLAMMABILITY	2	2
REACTIVITY	0	0
PERSONAL PROTECTION		



**DANGER:**  
DO NOT USE WELDING OR CUTTING TORCH ON THIS CONTAINER (EVEN WHEN EMPTY). After this container has been emptied, it may contain explosive and harmful vapors and residue. Do not reuse container for any purpose until commercially reconditioned.

ICS-4023 9/93

NET 410 LBS.

FOR INDUSTRIAL USE ONLY

BEFORE USE, REVIEW MATERIAL SAFETY DATA SHEET FOR FURTHER INFORMATION, INCLUDING CHRONIC HEALTH EFFECTS.

DO NOT USE WELDING OR CUTTING TORCH ON THIS DRUM (EVEN WHEN EMPTY)



# DIMETHYLFORMAMIDE

C.A.S. NO. 68-12-2

DOT Name:

COMBUSTIBLE LIQUID, N.O.S. (Dimethylformamide)

NA1993

**NOTICE:** Overexposure to solvent vapors can irritate the respiratory tract and cause headache, dizziness, drowsiness or other nervous system effects.

## WARNING!

- COMBUSTIBLE LIQUID • MAY CAUSE EYE, SKIN OR RESPIRATORY IRRITATION • MAY BE HARMFUL IF INHALED, SWALLOWED OR ABSORBED THROUGH THE SKIN
- RAPIDLY ABSORBED THROUGH SKIN
- MAY CAUSE LIVER DAMAGE • POSSIBLE CANCER HAZARD

### HANDLING & STORAGE:

Keep away from heat and flame. Drum should be grounded and bonded when transferring liquid contents.

Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, impervious gloves and other necessary protective equipment. Wash thoroughly after handling.

Use or store with adequate ventilation. Refer to applicable OSHA regulations. Keep workplace airborne concentrations below legal and recommended limits. Circumstances could require use of respiratory protection.

Do not transfer to unmarked container. Keep container closed. Never use pressure to empty. Empty containers may contain hazardous product residues. Keep closure end up. Loosen closure carefully.

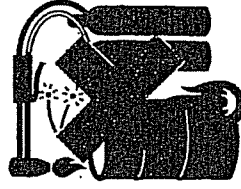
**BEFORE USE, REVIEW MATERIAL SAFETY DATA SHEET FOR FURTHER INFORMATION, INCLUDING CHRONIC HEALTH EFFECTS.**

### FIRE:

In case of fire, use water spray (fog), foam, dry chemical, or CO<sub>2</sub>.

### SPILL OR LEAK:

Contain spill and keep out of sewer. Absorb with inert material (e.g., dry sand or earth), then place in a chemical waste container for later disposal. Dispose of wastes in accordance with applicable federal, state and local regulations.



### DANGER:

After this container has been emptied, it may contain explosive and harmful vapors and residue. Do not cut, puncture or weld on or near this container. Do not reuse container for any purpose until commercially reconditioned.

Hazard Ratings:	HMS	NFPA
HEALTH	3*	1
FLAMMABILITY	2	2
REACTIVITY	0	0
PERSONAL PROTECTION		

\*May be chronic health effects—See MSDS.

NET 410 LBS.

FOR INDUSTRIAL USE ONLY

10&S-4023

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24-HOUR EMERGENCY TELEPHONE: 1-800-274-5263 OR 1-800-ASHLAND

10/89

OSHA 57-53-0

ISOPROPYL ALCOHOL, FLAMMABLE LIQUID UN1219

# ISOPROPANOL 99%

## WARNING!

FLAMMABLE LIQUID  
MAY BE HARMFUL IF INHALED  
LIQUID, VAPOR OR MIST MAY CAUSE EYE AND RESPIRATORY  
TRACT IRRITATION.  
PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN AND CAUSE  
DERMATITIS AND BURNS.

**ATTENTION:**  
MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS,  
HEADACHE OR NAUSEA.

### SPILL AND FIRE PROCEDURES:

Contain spill and keep out of sewer. Absorb with inert  
material (e.g., dry sand or earth), then place in a chemical  
waste container for later disposal. Dispose of wastes in  
accordance with applicable federal, state and local  
regulations.

In case of fire, use water (flood with water), dry chemical,  
carbon dioxide, or "alcohol" foam.

**Ashland Chemical**

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1-800-274-5263 OR 1-800-ASHLAND

**PRECAUTIONARY MEASURES:**  
Vapors form explosive mixtures with air. Keep away from  
heat, sparks, flame, pilot lights and other ignition  
sources.

Store in flammable label area. Container and equipment used  
for handling, storage or transfer must be grounded and  
bonded. This product is not suitable as a general purpose  
cleaner because of its flammability.

Avoid contact with eyes. Avoid prolonged or repeated  
contact with skin. Wear chemical splash goggles. Impermeous  
gloves and other necessary protective equipment. Avoid  
breathing vapor or mist. Do not swallow.

Use or store with adequate ventilation. Keep workplace air-  
borne concentrations below legal and recommended limits.  
Circumstances could require use of respiratory protection.  
Refer to applicable OSHA regulations.

Wash thoroughly after handling. Do not transfer to unmarked  
container. Keep container closed when not in use. Loosen  
closure carefully. Do not use pressure to empty. Empty con-  
tainers may contain hazardous product residues.

3507000 LOT # XXXXXXXXXX

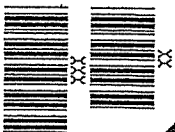
**FIRST AID:**  
IN CASE OF EYE CONTACT, immediately flush eyes with water.  
Call a physician if irritation develops and persists.  
IN CASE OF SKIN CONTACT, immediately flush skin with water.  
Remove contaminated clothing. Call a physician if irritation  
develops and persists. Wash clothing before reuse.  
IF INHALED, move individual into fresh air. IF SWALLOWED,  
induce vomiting as directed by medical personnel. Never give  
anything by mouth to an unconscious person. Call a physician.

FLASHPOINT=53°F



**DANGER:**  
DO NOT USE WELDING OR  
CUTTING TORCH ON THIS  
CONTAINER (EVEN WHEN  
EMPTY). After this container  
has been emptied, any con-  
taminated residue may re-  
lease and residue. Do not  
reuse container for any pur-  
pose until completely re-  
cleaned.

HAZARD RATING:	HMIS	NFPA
HEALTH	1	1
FLAMMABILITY	3	3
REACTIVITY	0	0
PERSONAL PROTECTION		



ACOS

NET XXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXX

44 XX  
7/01/91

**DANGER!**  
**EXTREMELY FLAMMABLE LIQUID.**  
**MAY CAUSE EYE, SKIN OR RESPIRATORY IRRITATION.**  
**MAY BE HARMFUL IF INHALED OR SWALLOWED.**  
**MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.**

**ATTENTION:**  
OVEREXPOSURE TO SOLVENT VAPORS CAN IRRITATE THE RESPIRATORY TRACT AND CAUSE HEADACHE, DIZZINESS, DROWSINESS OR OTHER NERVOUS SYSTEM EFFECTS.

**SPILL AND FIRE PROCEDURES:**  
Contain spill and keep out of sewer. Absorb with inert material (e.g., dry sand or earth), then place in a chemical waste container for later disposal. Dispose of wastes in accordance with applicable federal, state and local regulations.

In case of fire, use water spray (fog), foam, dry chemical, or carbon dioxide.



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**FIRST AID:**

**EYES:** Immediately flush with water for at least 15 minutes while lifting upper and lower eyelids. Do not use chemical antidote. If redness or irritation persists, get medical attention. **SKIN:** Thoroughly flush with water. If redness or irritation persists, get medical attention. Remove contaminated clothing and wash before reuse. Discard contaminated shoes. **INHALATION:** If affected remove to fresh air. If not breathing, give artificial respiration and get medical attention immediately. If breathing is difficult, get medical attention. **INGESTION:** DO NOT induce vomiting. Give two glasses of water and get medical attention immediately. NEVER give anything by mouth to an unconscious person.

**PRECAUTIONARY MEASURES:**

Vapors from explosive mixtures with air. Keep away from heat, sparks, flame, pilot lights and other sources of ignition. Store in flammable label area. Drum should be grounded and bonded when transferring liquid contents.

Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, impervious gloves and other necessary protective equipment. Wash thoroughly after handling.

Use or store with adequate ventilation. Refer to applicable OSHA regulations. Keep workplace airborne concentrations below legal and recommended limits. Circumstances could require use of respiratory protection.

Do not transfer to unmarked container. Keep container closed. Never use pressure to empty. Empty containers may contain hazardous product residues. Keep closure end up. Loosen closure carefully.

This product is not suitable for use as a general purpose cleaner because of its flammability.

**FOR INDUSTRIAL USE ONLY**

BEFORE USE, REVIEW MATERIAL SAFETY DATA SHEET FOR FURTHER INFORMATION, INCLUDING CHRONIC HEALTH EFFECTS.



**NET 55 GALS.**

ICS-4571 (02/95)



**DANGER:**  
DO NOT USE WELDING OR CUTTING TORCH ON THIS CONTAINER EVEN WHEN EMPTY. After this container has been emptied, it may contain explosive and harmful vapors and residue. Do not reuse container for any purpose until commercially reconditioned.

**DO NOT USE WELDING OR CUTTING TORCH ON THIS DRUM (EVEN WHEN EMPTY)**

*Ashland Chemicals*

**PROPRIETARY PRODUCT**

**DANGER!**

- EXTREMELY FLAMMABLE LIQUID
- MAY CAUSE EYE, SKIN OR RESPIRATORY IRRITATION
- MAY BE HARMFUL IF INHALED, OR SWALLOWED
- MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION

**HANDLING & STORAGE:**

Vapors from explosive mixtures with air. Keep away from heat, sparks, flame, pilot lights and other sources of ignition. Store in flammable label area. Drum should be grounded and bonded when transferring liquid contents.

Avoid breathing vapor, mist. Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, impervious gloves and other necessary protective equipment. Wash thoroughly after handling.

Use or store with adequate ventilation. Refer to applicable OSHA regulations. Keep workplaces airborne concentrations below legal and recommended limits. Circumstances could require use of respiratory protection.

Do not transfer to unmarked container. Keep container closed. Never use pressure to empty. Empty containers may contain hazardous product residues. Keep closure end up. Loosen closure carefully.

This product is not suitable for use as a general purpose cleaner because of its flammability.

**BEFORE USE, REVIEW MATERIAL SAFETY DATA SHEET FOR FURTHER INFORMATION, INCLUDING CHRONIC HEALTH EFFECTS.**

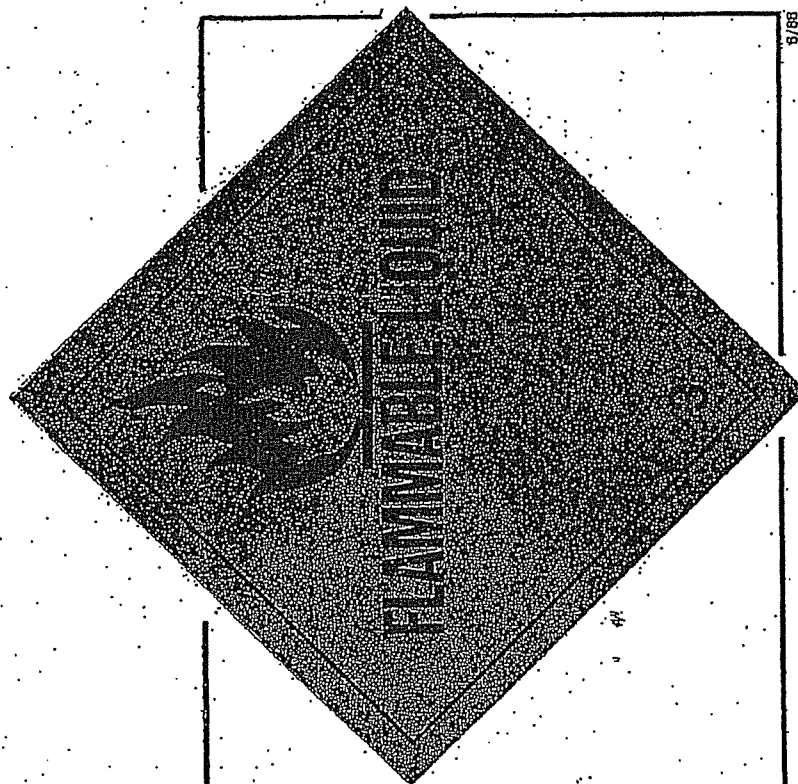
**NET 55 GALS**

IC88-4571

ASHLAND CHEMICAL COMPANY • DIVISION OF ASHLAND OIL, INC., P.O. BOX 2219, COLUMBUS, OHIO 43216

**24-HOUR EMERGENCY TELEPHONE: 606-324-1133**

**FOR INDUSTRIAL USE ONLY**



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